APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,843	08/13/2001	Oded Gottesman	1279-277	9783

167   7590   04/19/2006

FULBRIGHT AND JAWORSKI LLP
555 S. FLOWER STREET, 41ST FLOOR
LOS ANGELES, CA 90071

EXAMINER
CHAWAN, VIJAY B

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/831,843	GOTTESMAN, ODED
Office Action Summary	Examiner	Art Unit	
	Vijay B. Chawan	2626	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 January 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-36</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>1-10,20,32 and 33</u> is/are allowed.

6)☒ Claim(s) <u>11-14,16,22-31 and 34-36</u> is/are rejected.

7)☒ Claim(s) <u>15,19,21</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some *   c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 16 is objected to because of the following informalities: Claim 16 appears

to be missing in the amendment filed 1/27/06. Is claim 16 canceled? If so, appropriate

correction is required.

Allowable Subject Matter

1.   Claims 1-10, 20, and 32-33 are allowed.

2.   Claims 15, 19 and 21 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

4.   Claims 11-14, 17-18, 22-31, 34-36 are rejected under 35 U.S.C. 102(b) as being

anticipated by Kleijn (5,517,595).

As per claim 11, Kleijn teaches a method for using a computer processor to

interpolatively code input waveform signals at low data rates in which said signals

decomposed into or are composed of a slowly evolving waveform and other attributes or

components, the computer processor performing the step of analysis-by-synthesis

vector quantization of the slowly evolving waveform such that it minimizes or reduces

the effect of the non-ideal interpolation of a group of adjacent waveforms (Col.2, lines

36-65).

As per claim 12, Kleijn teaches the method for using a computer processor to

quantize waveforms by the step if using the accumulated distortion between adjacent

input waveforms to adjacent quantized and interpolated output waveforms (Col.2, lines

36-65).

As per claim 13, Kleijn teaches a method for using a computer processor to

interpolatively code input waveform signals in which the signal decomposed into or

composed of attributes or components one of which is a slowly evolving waveform

which has or from which one can extract a linear dispersion phase, the method using

the step of incorporating analysis-by-synthesis quantization of the dispersion phase

(Col.2, lines 36-65).

As per claim 14, Kleijn teaches the method of claim 13, including providing at least one codebook containing magnitude and dispersion phase information for predetermined waveforms, and in which the step of analysis-by-synthesis quantization of the dispersion phase is conducted by crudely aligning the linear phase of the input, then iteratively shifting said crudely aligned linear phase input, and/or comparing the shifted input, or equivalently shifting the quantized vector, to a plurality of vectors reconstructed from the magnitude and dispersion phase information contained in said at least one codebook, and selecting the reconstructed vector that best matches one of the iteratively shifted input vectors (Col.13, lines 45-65, Col.14, lines 15-35).

As per claim 17, Kleijn teaches a method for using a computer processor to interpolatively code input waveform signals, comprising using spectral and temporal pitch searches, computing a number of adjacent pitch values and then computing the most probable pitch value by computing the weighted average pitch value using the above said weight (Col.4, lines 1-7, Col.5, lines 14-23).

As per claim 18, Kleijn teaches the method of claim 17, in which the method of searching the temporal domain pitch comprises defining a boundary for a segment used for the summations in the computed measure used for the pitch search, selecting the boundaries of the segment that that maximize the similarity, or minimize the distortion measure, used for the pitch search, by iteratively shrinking and expanding the segment and by shifting the segment (Col.10, lines 52-60).

As per claim 22, Kleijn teaches a method for using a computer processor to perform vector quantization of the waveform signal gain sequence using the step of analysis-by-synthesis (Col.5, line 62 – Col.6, line 50).

As per claim 23, Kleijn teaches the method of claim 22, including using temporal weighting, and in which the temporal weighting is changed as a function of time whereby to emphasize local high energy events in the input signals (Col.14, lines 42-46).

As per claim 24, Kleijn teaches the method according to claim 22, comprising applying synthesis filter or predictor, which introduces selected high correlation or low correlation to a vector quantizer codebook in the analysis-by-synthesis vector quantization of the signal gain sequence whereby to add selected self correlation to the codebook vectors (Col.2, lines 36-62, Figures, 10, 11, 13, 14).

As per claim 25, Kleijn teaches the method of claim 24, in which selection between the high and low correlation synthesis filters or predictor is made to maximize similarity or relevant measure between the signal vector and a reconstructed (Col.14, lines 50-61).

As per claim 26, Kleijn teaches the method of claim 22, comprising using each value of gain in the analysis-by-synthesis vector quantization of the signal gain (Fig.14, item 501).

As per claim 27, Kleijn teaches the method of claim 22, wherein each value of gain is used to select from a plurality of shapes and associated predictors or filters,

each of which is used to generate an output shape vector, and comparing the output

shape vector to an input shape vector (Col.17, lines 31-56)

As per claim 28, Kleijn teaches the method of claim 27, in which said plurality of

shapes has a predetermined number of values is in the range of 2 to 50 (Col.13, lines

31-33).

As per claim 29, Kleijn teaches the method of claim 27, in which said plurality of

shapes has a predetermined number of values is in the range of 5 to 20 (Col.13, lines

31-33).

As per claim 30, Kleijn teaches a method for using a computer processor to

interpolatively code input waveform signals in which said signals decomposed into or

are composed of a slowly evolving waveform and other attributes or component,

comprising the step of using a coder in which a plurality of bits therein are allocated to

the vector-quantization of the dispersion phase of the slowly evolving waveform phase

from which the linear shift attribute was reduced or removed (Col.14, lines 8-61, Col,

lines 16-27).

As per claim 31, Kleijn teaches the method of claim 30 in which at least one bit is

allocated to the dispersion phase (Col.16, lines 16-27).

Claim 34 is similar in scope and content of the method claims above and are

rejected under similar rationale.

As per claim 35, Kleijn teaches the method of claim 12, including using

accumulated spectrally weighted distortion (Col.5, line 62 – Col.6, line 50, Col.14, lines

50-61).

As per claim 36, Kleijn teaches the method of claim 22, using a switch predictive synthesis filter or predictor (Col.5, line 62 – Col.6, line 50, Col.14, lines 50-61).

Response to Arguments

5.   Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

6.   Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

number for the organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Vijay B. Chawan
Primary Examiner
Art Unit 2654

vbc
4/17/06

**VIJAY CHAWAN
PRIMARY EXAMINER**